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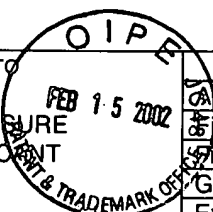
09/849452

Attached to PAPER No. 6

(Modified) PTO/SB/08A-B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Substitute for form 1449A-B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Complete if Known	
	Application Number	09/849,452
	Filing Date	May 4, 2001
	First Named Inventor	Michael Lassner
	Group Art Unit	4632-1636
	Examiner Name	Unassigned D. LAMBERTSON
	Attorney Docket Number	02-104910US
Date Submitted	January 30, 2002	



U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number	Kind Code (if known)			
DJ	AA	6,251,674	B1	Tobin et al.	06-26-2001	
DJ	AB	6,303,848	B1	Kumagai et al.	10-16-2001	

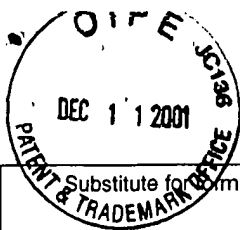
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FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
DJ	AC	International Search Report for International Application PCT/US01/14419. Not for publication.	

Examiner Signature	David Lambertson	Date Considered	11/12/02
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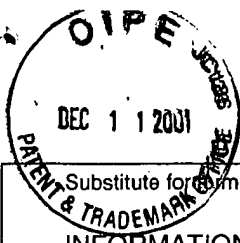
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		Number	Kind Code (if known)			
	AA	5,512,403		Stemmer	04-30-1996	
	AB	5,514,588		Varadaraj	05-07-1996	
DL	AC	5,605,793		Stemmer	02-25-1997	
	AD	5,763,239		Short et al.	06-09-1998	
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	AQ	5,939,250		Short, Jay M.	08-17-1999	
	AR	5,939,300		Robertson, et al.	08-17-1999	
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	BA	6,001,574		Short et al.	12-14-1999	
Examiner Signature	David Lambertson			Date Considered	7/21/03	

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	Group Art Unit	1632 / 1636
	Examiner Name	Unassigned D. LAMBERTSON
Attorney Docket Number		02-104910US

	BB	6,004,788	Short	12-21-1999	
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	BM	6,180,406	Stemmer	01-30-2001	
	BN	6,238,884	Short et al.	05-29-2001	

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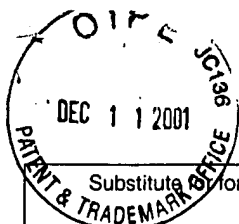
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FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				
	BO	WO	97/07205		Novo Nordisk A/S	02-27-1997		
	BP	WO	97/20078		Affymax Technologies	06-05-1997		
	BQ	WO	97/25410		Novo Nordisk A/S	07-17-1997		
	BR	WO	97/35957		Maxygen, Inc.	10-02-1997		
	BS	WO	97/35966		Maxygen, Inc.	10-02-1997		
	BT	WO	97/44361		Recombinant Biocatalysis Inc.	11-27-1997		
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	BW	WO	97/48794		Recombinant Biocatalysis Inc	12-24-1997		
	BX	WO	98/00526		Recombinant	01-08-1998		

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Group Art Unit	1632 — 1630
Examiner Name	Unassigned D. LAMBERTSON
Attorney Docket Number	02-104910US

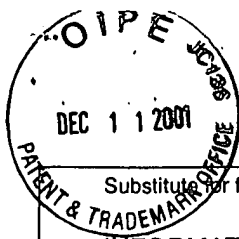
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				Biocatalysis Inc		
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	CC	WO	98/27230	Maxygen, Inc.	06-25-1998	
	CD	WO	98/28416	Novo Nordisk A/S	07-02-1998	
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	CF	WO	98/36080	The Dow Chemical Company	08-20-1998	
	CG	WO	98/41622	Novo Nordisk A/S	09-24-1998	
	CH	WO	98/41623	Novo Nordisk A/S	09-24-1998	
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	CJ	WO	98/42832	California Institute of Technology	10-01-1998	
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	CL	WO	98/58085	Diversa Corp.	12-23-1998	
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	CO	WO	99/10472	Diversa Corp.	03-04-1999	
	CP	WO	99/10539	Diversa Corp.	03-04-1999	
	CQ	WO	99/19518	Diversa Corp.	04-22-1999	
	CR	EP	0911396A2	Maxygen, Inc.	04-28-1999	
	CS	WO	99/21979	Maxygen, Inc.	05-06-1999	
	CT	EP	0911396A3	Maxygen, Inc.	05-06-1999	
	CU	WO	99/23107	Maxygen, Inc.	05-14-1999	
	CV	WO	99/23236	Diversa Corp.	05-14-1999	
	CW	WO	99/29902	California Institute of Technology et al.	06-17-1999	

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Group Art Unit	1632 1634
Examiner Name	Unassigned D. LAMBERTSON
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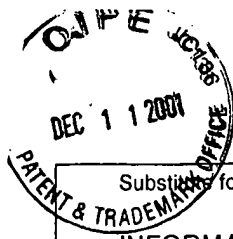
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CY	WO	99/41368	Maxygen, Inc.	08-19-1999
CZ	WO	99/41369	Maxygen, Inc.	08-19-1999
DA	WO	99/41383	Maxygen, Inc.	08-19-1999
DB	WO	99/41402	Maxygen, Inc.	08-19-1999
DC	WO	99/45154	Diversa Corp.	09-10-1999
DD	WO	99/57128	Maxygen, Inc.	11-11-1999
DE	WO	99/65927	Maxygen, Inc.	12-23-1999
DF	WO	00/42560	Maxygen, Inc.	07-20-2000
DG	WO	00/42561	Maxygen, Inc.	07-20-2000
DH	WO	00/53744	Diversa Corporation	09-14-2000
DI	WO	00/58517	Diversa Corporation	10-05-2000

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
DJ		Chang, C., et al. (1999) "Evolution of a cytokine using DNA family shuffling." <i>Nature Biotechnology</i> 17:793-797.	
DK		Christians, F.C. et al., (1999) "Directed evolution of thymidine kinase for AZT phosphorylation using DNA family shuffling." <i>Nature Biotechnology</i> 17:259-264.	
DL		Coco et al., (2001) "DNA shuffling method for generating highly recombined genes and evolved enzymes" <i>Nature Biotechnology</i> vol. 19 pp. 354-359	
DM		Crameri et al., (1993) "10(20)-Fold aptamer library amplification without gel purification," <i>Nuc. Acids Res.</i> 21(18):4410.	
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DO		Crameri, A. et al., (1997) "Molecular evolution of an arsenate detoxification pathway by DNA shuffling." <i>Nature Biotechnology</i> 15:436-438	

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	DR	Cramer, A. et al., (1998) "DNA shuffling of a family of genes from diverse species accelerates directed evolution." <i>Nature</i> 391:288-291.	
	DS	Gates, C.M. et al., (1996) "Affinity selective isolation of ligands from peptide libraries through display on a lac repressor 'headpiece dimer'." <i>Journal of Molecular Biology</i> 255:373-386.	
	DT	Minshull, J., Stemmer, W.P.C. (1999) "Protein evolution by molecular breeding." <i>Current Opinion in Chemical Biology</i> 3:284-290.	
	DU	Ness, J. et al., (1999) "DNA shuffling of subgenomic sequences of subtilisin." <i>Nature Biotechnology</i> 17:893-896.	
	DV	Patten, P.A. et al., (1997) "Application of DNA Shuffling to Pharmaceuticals and Vaccines." <i>Current Opinion in Biotechnology</i> 8:724-733.	
	DW	Pelletier, Joelle N., (2001) "A Rachitt for our toolbox" <i>Nature Biotechnology</i> vol. 19, p. 314-315	
	DX	Stemmer, W.P.C. (1994) "DNA Shuffling by random fragmentation and reassembly: In vitro recombination for molecular evolution." <i>PNAS</i> 91:10751	
	DY	Stemmer, W.P.C. (1994) "Rapid evolution of a protein in vitro by DNA shuffling." <i>Nature</i> 370:389-391.	
	DZ	Stemmer, W.P.C. (1995) "The Evolution of Molecular Computation." <i>Science</i> 270:1510	
	EA	Stemmer, W.P.C. (1995) "Searching Sequence Space." <i>BioTechnology</i> 13:549-553.	
	EB	Stemmer, W.P.C. (1996) "Sexual PCR and Assembly PCR." In: <i>The Encyclopedia of Molecular Biology</i> . VCH Publishers, New York. pp. 447-457.	
	EC	Stemmer, W.P.C. & Soong, N.W. (1999) "Molecular breeding of viruses for targeting and other clinical properties." <i>Tumor Targeting</i> 4:59-62.	
	ED	Zhang, J. et al., (1997) "Directed evolution of an effective fucosidase from a galactosidase by DNA shuffling and screening." <i>Proceedings of the National Academy of Sciences, USA</i> 94:4504-4509.	

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